

# SAKETA SAMA

**Botanical name:** *Vigna marina* (Fabaceae)

**Location specific common names:** te kitoko, te biin, te ruku (Kiribati), saketa sama (Tuvalu), drautolu (Fiji), dune bean, beach cowpea, beach pea, notched cowpea, nanea. E isi se numiga malie ikonei me isi foki se lakau e solo foki pela mese saketa sama - *Ipomoea pes-caprae* (beach morning glory, se vaega ote pateta magalo (kumala) e loa ona kaavei, lasi lae matilotilo ona lau kae peepolo ona pula, e masani o fakaigoa faka-kiribati kite ‘ruku’.

**Fakamatalaga ote saketa sama:** Te mafuaga ote lakau tenei e se mautinoa tonu kae e matea a aka e ola i tafaatai o fenua ote (tropics) ite lalolagi. Ate lausa ote ola vale te lakau tenei ona ko fuaga e se mafai o masei ite sua tai. E tolu a maga ote lau e tasi kae e sega ona pula, kona vaega e kese ei ate saketa sama mai niisi o lakau ote ituu kaiga ote lakau tenei, kola e tolo. A fulafulaga pela mene mapu I aka ote lakau tenei e isi ne (rhizobia), ne (bacteria) ne manu foliki e mafai o faite te (nitrogen) ite eaa ke mafai o fakaoga ne lakau, maise ite atiakega ote polotini mo (enzymes). Te vaega taua tenei e fai nete itukaiga o lakau kote (*vigna*) se mo latou fua kae fakalausa te (nitrogen) ite laukele mo niisi o lakau e toki mai tua.

**Fakaogaaga:** A lau ote saketa sama e tai malosi atu i niisi o lau o lau-vesiapolu, tela e tau loa o fakaoga a lau koi tama, kola e` mafai o tunu tasi mo fai a suupu, sua mo kale, ka sili atu la te aoga mafai e sakatasi mo lolo. A fuaga pela mene piini e maluga te niutulisini ie, telaa e mafai o saka tasi mo lolo. A lau o saketa e lei foki mo fagai a puaka. Te maluga te levolo ote (nitrogen), fiti (iron) mote siniki (zinc) se vaega taua mo fai a kaiao (kaiao mata) mo compost, kae mafai e tuku loa ke solo (cover crop) e lei foki me ola vave atu i mouku telaa ka solo mai luga o mouku ka se ola lei. Niisi o lakau penei mote ‘saketa sama’ e aofia ie a latou konei, mucuna, centrosema mote pueraria. A vaega konei e se ola lei i laukele o fenua foliki (atolls) me masima kae (alkaline high pH).

**Vailakau mo masaki:** I nai fenua o Asia mote pasefika pela mo Hawaii – te saketa sama e lasi tena fesoasoani o fakamafu mea pala, fakafoa, mo (ulcers); ate kau mote lau malulu e fakapiki samu loa kite pakiaga.



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**Te mafai o maua:** A saketa sama e mafai o teke atu kite masima kae ola vale i fenua o Kiribati mo Tuvalu.

**Fakaolaaga:** E mafai o fakaola mai katiiga ote foitino io me fakaoga fuaga, kaelei atu mana keli ake te tafito ote lakau olo tasi aka mo aka pela foki mo (root nodules), ko ave iei kite pokon ne fakatoka. Te vaega tokiiga tenei e vave atu ite fakaoga o katiiga io me ko fuaga. A fuaga o (legumes) e masani o makeke te ufi mai tua tela e manakogina se naifi mo faai te fuaga koa tuku ei ki loto ite vai mose 24 itula, ko tuku ei kite telee fakaola lakau.

**E fakaola kae toki pefea:** Ke tumau te lava o vai ke oko kite taimi koa ola lei ai a lakau. Ite taimi tena ko kamata a lakau o mafai o teke atu ki tulaga ote taulaa, kae ka ola lei ite laa pela foki ite malu.

**Pokotiaga:** E isi ne Fungi pela mo *Cercospora canescens*, te vaega o *Colletotrichum*, te anufe o lekiuma pela mo *Euchrysops cneus* & *Lampides boeticus* e mafai o faite fakalavelave. E vave o pokotia mafai e siusiu kae e se lasi te pokotiaga ki fenua ote tolopika (tropics).

**Te tauga:** E taaua ke fakaoga a lau koi tama (te lima o lau foou ko katoatoa mai te mata) fanaifo ki lalo. A fuataga ote saketa sama e mafai foki o fakaaoga kae koi tama foki.

**Te tauga mote tausiga:** A lau o fulu ke vai maa, kae tausi ise koga mokomoko kae malu foki mai te laa. E gali atu mafai e tau a lau kae kai foki ite aso tena.

**Fakamatalaga ne maua mai sukesukega/Niutulisini:** A lau ne fakaoga ite sukesukega tenei ne faamaua mai Kiribati mo Tuvalu, kae matea atu me maluga te levolo ote fiti (iron), siniki (zinc) mote polotini (protein). E matea te levolo ote makenisi (manganese) mote kopa (copper) i levolo ote (vigna samples) e maluga atu ki niisi o vaega o lakau, a levolo o latou i tofoga e 6 samples ne maua mai niisi koga e se mate ate kese me maluga atu i niisi o lakau e olotasi ite laukele tena. E 2 lima fonu (100 grams) e lava mo kai a tino ite kaiga e tasi, e lava foki te levolo ote niutulisini ite meakai tena. Ate saketa sama e malosi kae maumea:

**Fiti (Iron):** E taua mote lei saukatoa ote toto mote enetise.

**Siniki (Zinc):** E taua ite puipui mai masaki, te gasolo ote foitino, te fakaaogaaga o masoa i meakai, (DNA) mote faitega o polotini. E tusa mote 600 sua mo polotini e isi ne siniki (zinc) ite foitino ote tagata.

**Makenisi (Manganese):** Enzymes containing manganese are important in the metabolism of carbohydrates, protein and fats, and in enhancing immunity.

**Polotini (Protein):** E taua ite faitega o kano, uifi o sela (cell membranes), sua mo vaega ote toto, manu teke masaki (antibodies), DNA and RNA.

This table compares selected mineral nutrients in leaves of yellow beach pea, taro and *Gliricidia sepium* (a legume tree) grown together at ALD Central Nursery, Bikenibeu, South Tarawa, Kiribati in 2014 and English cabbage (average of samples bought from Honiara market, Solomon Islands and Nukualofa market, Tonga in 2012) (concentration in mg/kg dry weight, except N: % dry weight).

	Fe	Mn	Cu	Zn	Ca	Mg	K	S	N %
Yellow beach pea	<b>88</b>	<b>59</b>	<b>10</b>	<b>49</b>	13800	4200	18400	2700	<b>4.5</b>
Taro	<b>84</b>	21	2	21	11800	2300	<b>41000</b>	<b>4900</b>	<b>4.3</b>
Gliricidia	50	26	2	10	<b>30000</b>	<b>8200</b>	19400	2800	3.5
Cabbage	40	23	2	20	5700	1450	<b>29000</b>	3750	2.8

Fe: iron; Mn: manganese; Cu: copper; Zn: zinc; Ca: calcium; Mg: magnesium; K: potassium; S: sulphur; N: nitrogen  
Analyses conducted by Waite Analytical Services, University of Adelaide, South Australia

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